UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, ILLINOIS 60604

SUBJECT: CLEAN AIR ACT INSPECTION REPORT
Fitzgerald Finishing LLC, Detroit, Michigan

FROM: Natalia Vazquez
AECAB (MI/WI)

THRU: Sarah Marshall, Section Supervisor
AECAB (MI/WI)

TO: File

BASIC INFORMATION

Facility Name: Fitzgerald Finishing LLC

Facility Location: 17450 Filer St, Detroit, Michigan 48212

Date of Inspection: August 17, 2022

EPA Inspector(s):
1. Natalia Vazquez, Environmental Engineer
2. Brittany Cobb, Environmental Engineer

Other Attendees:
1. Jorge Acevedo, Inspector – Michigan Department Environment, Great Lakes and Energy Air Quality Division (EGLE)
2. Tom Melita, President and Part Owner – Fitzgerald Finishing LLC
3. Amanda Davison, Safety and Environmental Coordinator – Fitzgerald Finishing LLC
4. Mike King, Maintenance Manager – Fitzgerald Finishing LLC

Contact Email Address: adavison@fitzfinishing.com

Purpose of Inspection: Determine compliance with the Clean Air Act

Facility Type: Metal coating facility

Regulations Central to Inspection: Permit to install (PTI) MI permit, dated October 2, 2015

Arrival Time: 1:00 PM
Departure Time: 2:30 PM

Inspection Type:
☒ Unannounced Inspection
☐ Announced Inspection

OPENING CONFERENCE

☒ Presented Credentials
☒ Stated authority and purpose of inspection
☒ Provided Small Business Resource Information Sheet
☒ Provided CBI warning to facility

The following information was obtained verbally from Amanda Davison, Mike King and Tom Melita unless otherwise noted.

Process Description:
Steel parts are cleaned to remove oil, grease, and debris and then coated with paint. The parts are loaded into baskets, dipped in paint and then spun to remove excess paint. The coating and spinning process occurs inside a chamber. Coated parts are then cured in an oven at 500 degrees F. There are seven coating lines, each with an oven, that are controlled and have monitoring and record keeping requirements as per the facility's PTI. The facility has three uncontrolled coating lines that are not covered by the PTI. These lines mostly use zinc phosphate. Parts typically receive two coats of paint. The four newer lines can process approximately 25 baskets per hour, the three older lines can process approximately 40 baskets per hour. There are about 250 pounds of steel in each basket.

Emissions from the seven coating chambers and ovens are routed through a ventilation system with fans to a regenerative thermal oxidizer (RTO). The RTO has a minimum temperature requirement of 1450 degrees F in its combustion zone as required by the permit. The permit also requires 80 percent capture efficiency and 95 percent destruction efficiency of volatile organic compound (VOC). Furthermore, the permit requires the facility to meet a minimum retention time of 0.5 seconds. The facility operates the RTO with a combustion zone at 1500 degrees F and always keeps it on. When the facility is not operating it keeps the RTO idle.

The facility has one mechanical blasting operation, the emissions are controlled by a dust collector. This process is rarely used by the facility. Parts are put through the mechanical blasting after they are cured.

Staff Interview:
- The facility is not currently calibrating its temperature gauge for the RTO.
- The RTO had a performance test in 2015. This performance test was used to develop its emission factors used in its emission calculations.

TOUR INFORMATION

EPA Tour of the Facility: Yes

Data Collected and Observations:

- Temperature combustion chamber zone: BED 1 High 1594 degrees F
  BED 2 High 1601 degrees F
- Temperature in the exhaust of RTO: 216 degrees F

Photos and/or Videos: were taken during the inspection.

Field Measurements: were not taken during this inspection.

CLOSING CONFERENCE

☒ Provided U.S. EPA point of contact to the facility

Requested documents:

- Safety Data Sheets for all coating paints
- VOC and hazardous air pollutant (HAP) 12-month rolling averages (January 1, 2020 – July 31, 2022)
- Malfunction & Abatement Plan
- RTO performance test
- RTO's manufacturer design parameters, including retention time
- RTO's temperature in its combustion zone (January 1, 2021 – July 31, 2022)
- Following monthly records for FG-DIPSPINS
  - Gallons of each coating, reducer and clean-up solvent used and reclaimed
  - VOC and each single HAP (specify the name of each HAP) content of each coating reducer and clean-up solvent as applied
  - VOC and each single HAP (specify the name of each HAP) mass emission calculation determining the monthly emission rate per calendar month

Concerns:
EPA will verify applicability of 40 C.F.R. Part 63 Subpart XXXXXX of the mechanical blasting process.

DIGITAL SIGNATURES

Report Author: NATALIA VAZQUEZ RIVERA Digitally signed by NATALIA VAZQUEZ RIVERA Date: 2022.09.06 09:09:27 -05'00'

Section Supervisor: SARAH MARSHALL Digitally signed by SARAH MARSHALL Date: 2022.09.06 10:16:28 -05'00'

APPENDICES AND ATTACHMENTS

1. Appendix A: Digital Image Log

Facility Name: Fitzgerald Finishing LLC
Facility Location: 1750 Filer Detroit, Michigan 48212
Date of Inspection: August 17, 2022

APPENDIX A: DIGITAL IMAGE LOG

1. **Inspector Name:** Natalia Vazquez	2. **Archival Record Location:** OneDrive and ERC

Image Number	File Name	Date and Time (Eastern Standard Time)	Description of Image
1	IMG_0176.JPG	2022:08:17 14:00:20	Oven exhaust to the RTO
2	IMG_0178.JPG	2022:08:17 14:11:59	dust collector
3	IMG_0179.JPG	2022:08:17 14:17:31	temperature readings for the temperature monitoring system
4	IMG_0180.JPG	2022:08:17 14:18:12	RTO
5	IMG_0181.JPG	2022:08:17 14:18:37	RTO